

This box is 7cm x 7cm.

That means if you **put your Aranet4 face-down on this box**, it should fit inside the lines.

If it doesn't, it means you didn't print it out in "Actual Size".

Please print out this template in "Actual Size" or "scale 100%"
(found in your printing settings).

Materials:

- fabric: enough for outer layer and lining
- batting (kinda optional)
- needle & thread in your color of choice
- 1m / 1 yard of bias tape or 2cm wide ribbon (this is a generous length)
- 10cm / 4" of wide elastic
- iron for ironing

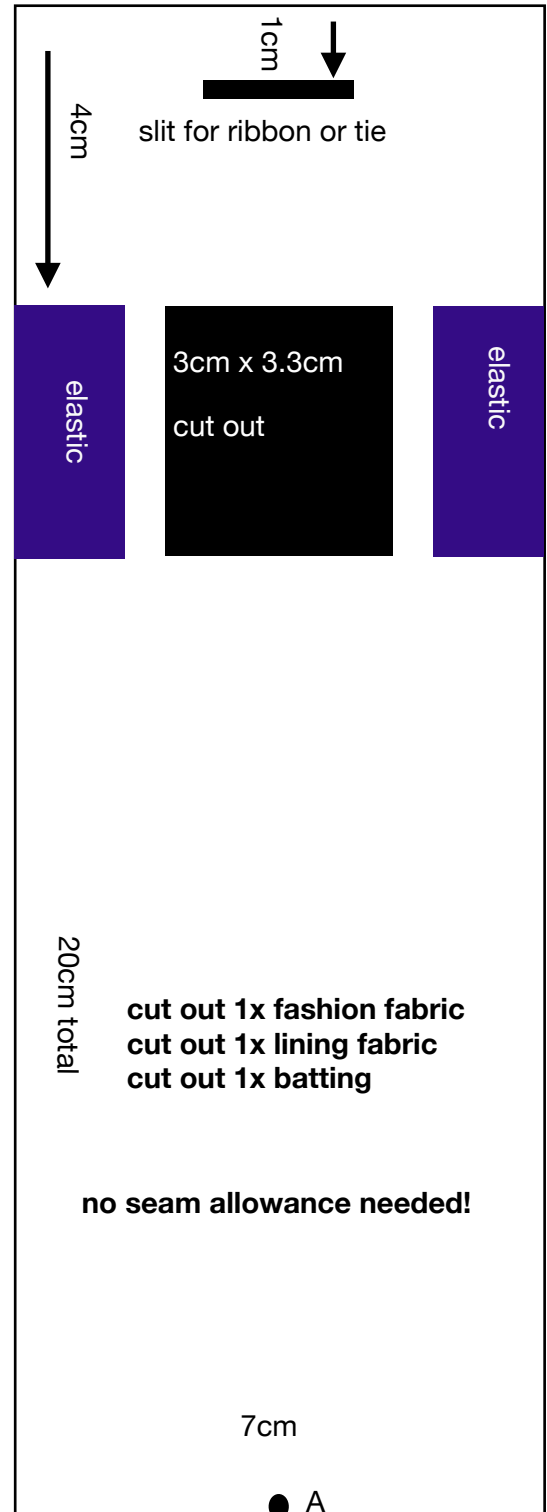
This project is **beginner friendly**.

You will be

- choosing and cutting fabric
- choosing an elastic
- using straight stitches
- using bias binding or ribbon
- making a buttonhole

template info:

- template is a rectangle 7cm x 20cm
- the window is located 4cm from the top and 2cm from each side
- the window is a rectangle that is 3cm wide and 3.3cm tall
- the elastic placement is on the sides at the same height as the window
- the slit for the ribbon loop is located in the middle 1cm from the top





These are the prototypes I made.
They are wonky and full of mistakes.
They still work, though.
Yours will be much prettier.
Share pictures of them with me!. Use the hashtag #AranetCover

Choosing Materials

- Fabric:

You can use any fabric you like. Thin cotton or a nice felt will both work.

Someone who has never sewn before or who wants as little sewing as possible could use a single strip of felt, cut out the part for the screen, make a slit for the ribbon, and attach a ribbon loop at the top with some stitches without doing the whole binding bit and be done.

Someone who wants to use silk, satin, tulle, chiffon, or other "advanced" fabric will have to accept the challenges that that particular fabric brings. I recommend using stabilizer.

I do not recommend using a fabric with a lot of stretch; simply because the piece needs some rigidity.

- Batting:

Batting is recommended for thin fabrics if you want the finished result to protect your Aranet4 from bumps. You can also get creative and use something else, like a bit of felt or a strip cut from an old sweater or old jeans. Basically what you want to achieve is some cushioning for the device.

- Elastic:

The elastic that you use can be a wide or narrow elastic. If you choose a narrow elastic (sometimes we like to use what we have at hand, rather than going out to buy stuff) I recommend using several strips and spacing them out a little.

- Binding:

Bias binding or ribbon depends on your preference. The advantage of ribbon is that you just take your length of ribbon and sew it on. The advantage of bias binding is that you can make your own rather easily and don't have to worry about your binding not matching your fabric.

- Sewing equipment:

You do not need a sewing machine for this. This project **can be done by hand** using a backstitch or running stitch only.

Some people like their thread to match their project exactly (in this case it would need to match the binding) so it becomes almost invisible. If that is not possible (because it is 10PM and you're in your PJs, unwilling to wait to get started e.g.) you can use whatever thread you have. You can try using slightly darker thread or making the stitching a very visible and bold part of your project. You could even go nuts and decide to use a fancy stitch..

Instructions

- 1) read through all of the instructions before starting; even the Binding Instructions and Buttonhole by Hand on the last page
- 2) choose your materials, lay them out, make sure you have enough of everything, iron your fabric if needed (it is advisable to wash and dry your fabric if you plan on washing and drying your finished product in the future)



- 3) print out the template in "Actual Size", check that it is the right size, and cut out
- 4) use the template to mark your fabric (+ batting)
- 5) **pay attention!** cut your pieces out of the fabric but **do not yet cut the window for the screen or the slit for the ribbon**
- 6) lay your fabric **right sides together** (the "right" side is the one you want showing in your finished product)



- 7) use the lines that show you where to cut a hole for the screen as a guide and stitch along those lines



- 8) cut an X into that little square, ending in the corners. Try to go almost all the way up to your stitching
- 9) trim the excess fabric back to 2mm all around



- 10) cut your batting out, **including the hole for the screen**
- 11) place the batting piece onto your fabric piece making sure the windows are aligned



- 12) flip one of the fabric sides through the hole; your batting should now be sandwiched between the two fabric pieces and the right sides of the fabric should be on the outside



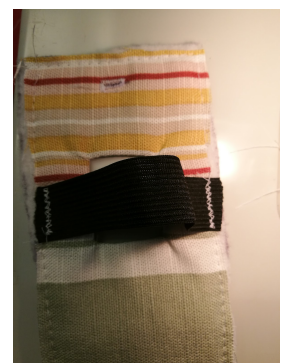
- 13) make that little window look nice by making your fabric behave and ironing it into place; make it as sharp and defined as you can.



- 14) baste the pieces including the batting together along the edge (basting means using a needle and thread to secure pieces together with wide stitches that are later covered up or even removed)
15) choose a tiny zig-zag stitch and stitch the window into place.



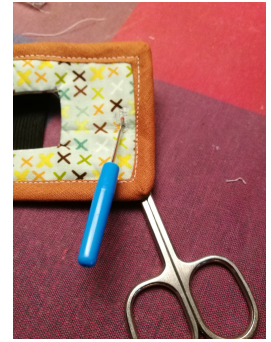
- 16) lay your piece with the lining side up
17) take your elastic and place the ends where you marked your elastic placement
18) baste the ends of the elastic into place



- 19) take your ribbon or bias binding and bind the edges, starting at the little dot marked "A"
You can have pointy corners. That means folding the binding so that it'll make pointy corners.
OR
You can round your corners. That might mean snipping the corners of your piece before you bind it. It definitely means going around the corners carefully so you catch the piece with your needle too.



- 20) when you have gone all around and returned to point "A" decide how big you want the loop of your finished item to be; play around with different lengths before deciding and cutting; then attach the end to the piece.
- 21) now you will create a little slit for your loop to go through and close the cover
- mark where the slit will go
 - either use your buttonhole setting on your machine to make a buttonhole and then cut the slit open OR cut the slit first and make a buttonhole by hand (see Buttonhole by Hand)



- 22) Admire your handiwork, put your Aranet4 in its new cover, pat yourself on the back, attach the cover to your belt loop or handbag or backpack, and go out to take readings in different locations.



Alternative Constructions

You don't need to make the loop that I made. You could just as easily close the cover with velcro or an actual button or snaps. You could just make a small loop and put a carabiner through it. Or a keychain. You could also make the loop really really REALLY long and wear your Aranet4 around your neck. If you work carefully your finished project will be reversible (Versatility! We like it!) You could use a strip of fabric instead of the elastic (it will have to be a bit longer than the elastic though because it is not, well, elastic. So measure carefully.) You could make this out of cardboard. I did. Go look at it on page 2.

Binding Instructions

We are using a finishing method that encases all the raw edges. This means there are no seam allowances and we can have nice clean edges.

Bias binding or bias tape can be bought in all kinds of colors, just like ribbon. Unlike ribbon, it is easy to make your own.

There are lots of tutorials on double fold bias tape and single bias tape on the internet and I encourage you to find them and maybe watch some videos. It will make reading my instructions below unnecessary and will give you visuals for how to finish your project.

Making your own double fold bias tape

In our case the bias-part is not so important (it would be if we wanted it to be stretchier), so you can just cut a nice 4cm wide strip of fabric that is 1m long. Then you fold it in half width-wise so that it is still 1m long but only 2cm wide. Iron that down. Open it up again. Fold the top length down towards the crease that you just made. Iron that down. Do the same with the bottom length. Then iron it all nicely so that it is a thick 1cm wide strip that is 1m long.

We want it to look like this ->



Sewing on your binding

There are many ways to attach your binding. We are going to go with an easy way. This way will have visible stitches. If you don't want visible stitches then the internet has lots of tutorials on how to achieve that.

Stitch the binding on to the inside of the project first, folding it at the corners to make those crisp and pointy. Then cover that stitching on the outside with the binding and then doing a much neater job on the visible part of the project. Maybe even use an interesting stitch. Get creative.

Buttonhole by Hand

So. You've decided you want to make your buttonhole by hand.

First go to https://en.wikipedia.org/wiki/Buttonhole_stitch . Then cut the slit open and reinforce the edge of the slit with the stitch all around. You can use your thread doubled up to make it go a little faster.

This is what the stitch looks like ->

You are basically making little loops around the opening and securing them with little knots.

